

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB NO. 1004-0137  
Expires: January 31, 2018

**SUNDRY NOTICES AND REPORTS ON WELLS**  
Do not use this form for proposals to drill or to re-enter abandoned well. Use form 3160-3 (APD) for such proposals.

5. Lease Serial No.  
NMLC028775B

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.  
8910123980

8. Well Name and No.  
RJ UNIT 102

9. API Well No.  
30-015-03140-00-S1

10. Field and Pool or Exploratory Area  
GRAYBURG

11. County or Parish, State  
EDDY COUNTY, NM

**SUBMIT IN TRIPLICATE - Other instructions on page 2** AUG 21 2019

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator  
COG OPERATING LLC  
Contact: ABIGAIL ANDERSON  
E-Mail: abbym@bcmmandassociates.com

3a. Address  
600 W ILLINOIS AVENUE  
MIDLAND, TX 79701

3b. Phone No. (include area code)  
Ph: 432-580-7161

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
Sec 27 T17S R29E NWNE Tract 2A 660FNL 1980FEL

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Deepen
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Alter Casing
	<input type="checkbox"/> Hydraulic Fracturing
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Change Plans
	<input checked="" type="checkbox"/> Plug and Abandon
	<input type="checkbox"/> Convert to Injection
	<input type="checkbox"/> Plug Back
	<input type="checkbox"/> Production (Start/Resume)
	<input type="checkbox"/> Reclamation
	<input type="checkbox"/> Recomplete
	<input type="checkbox"/> Temporarily Abandon
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Well Integrity
	<input type="checkbox"/> Other
	<input type="checkbox"/> Water Disposal

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplate horizontally, give subsurface locations, bearings and true depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BFA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in any interval, Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

1. Set 5.5" CIBP @ 3200'. Spot 25 sx cmt on top. Circulate hole w/ MLF.

2. Set 5.5" CIBP @ 2250'. Spot 25 sx cmt on top. Pressure test csg. to 500 psi. Circulate hole w/ MLF.

3. Perf & Sqz 55 sx @ 1990-1890. WOC & Tag. 1788-1628 (T/ow) 2243 (San Andres) @ (7" shoe)

4. Perf & Sqz 45 sx @ 60' to surface.

5. Cut off wellhead and weld on Below Ground Dry Hole Marker.

*Perf @ 2496. SQZ cmt To 2300. WOC Tag. (Top San Andres) @ (7" shoe)*

*Add Plugs: Perf 5 1/2 & 7" deep shots. @ 1060. SQZ cmt to 605. WOC Tag (Shoe & B/salt).*

*Perf @ 425 Both 5 1/2 & 7". SQZ cmt to 325 CT/salt*

*GC 8/22/19 Accepted for record - NMOCD*

*Deep Penetrating Shots. Both 5 1/2" & 7" Cogs. Verify cmt surf. all annulus.*

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #463520 verified by the BLM Well Information System For COG OPERATING LLC, sent to the Carlsbad Committed to AFMSS for processing by DEBORAH MCKINNEY on 04/30/2019 (19DLM0450SE)

Name (Printed/Typed) ABIGAIL ANDERSON Title AGENT

Signature (Electronic Submission) Date 04/30/2019

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By *[Signature]* Title SAET Date 8-5-19

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office CFO

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

\*\* BLM REVISED \*\*

*[Handwritten mark]*

COG Operating LLC

Lease & Well #

RJ Unit # 102

1937

30-015-03140

Elevation - 3550'

KB -

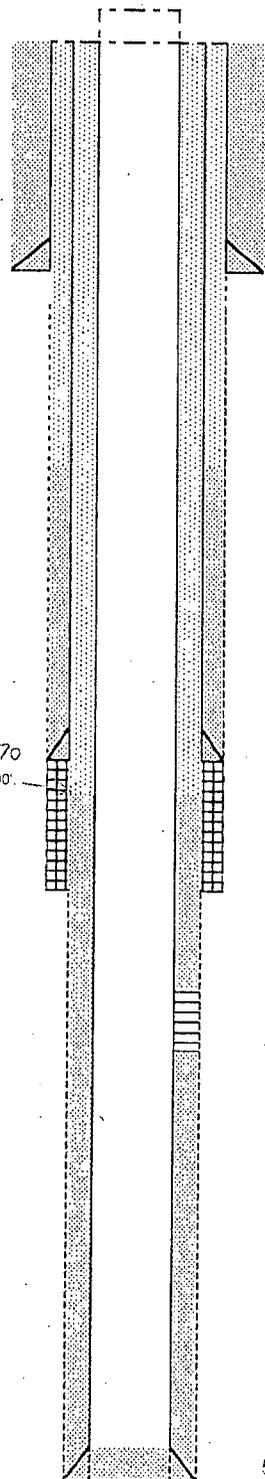
T/salt 375

B/salt 655

Qu 1738

GB 2113

SA 2446



8 5/8" 24# @ 1010', cmt w/ 50 sx. March, 1937

TOC ?

7" 20# csg @ 2293', cmt w/100 sx March 1937

TOC ?

2670  
Top of cmt @ 2600'

GB/SA (Behind pipe)  
Completed in Open Hole 2293 - 2850'

GB/SA  
3236-42, 46-50, 52-56, 58-63, 71-76, 4 spf  
Acidized w/500 gal 15% NEFE  
Fraced w/10,000 gal oil, 18,000 # sd.

5 1/2" 11.6# @ 3288', cmt w/100 sx.

PBTB

32.8109932

-164.0604706

COG Operating LLC

Lease & Well #

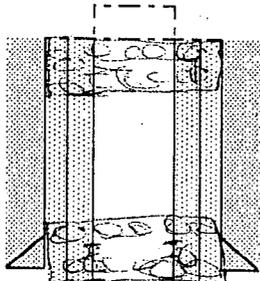
RJ Unit # 102

1937

Elevation - 3550'

KB -

① P.H. S<sub>12</sub> 35' STC  
60' - surface



② P.H. S<sub>12</sub> 45' STC  
1490 - 1590 - TAG

8 5/8" 24# @ 1010', cmt w/ 50 sx. March, 1937

③ S.S. LIBPC 2250 w/ 25 ST  
TAG

Top of cmt @ 2600'

7" 20# csg @ 2293', cmt w/100 sx March 1937

GB/SA (Behind pipe)  
Completed in Open Hole 2293 - 2850'

④ S.S. LIBPC 3200 w/  
25 ST TAG

GB/SA  
3236-42, 46-50, 52-56, 58-63, 71-76, 4 spf  
Acidized w/500 gal 15% NEFE  
Fraced w/10,000 gal oil, 18,000 # sd.

PBTD'

5 1/2" 11.6# @ 3288', cmt w/100 sx.

BUREAU OF LAND MANAGEMENT  
Carlsbad Field Office  
620 East Greene Street  
Carlsbad, New Mexico 88220  
575-234-5972

Permanent Abandonment of Federal Wells  
Conditions of Approval

Failure to comply with the following Conditions of Approval may result in a Notice of Incidents of Noncompliance (INC) in accordance with 43 CFR 3163.1.

1. Plugging operations shall commence within ninety (90) days from the approval date of this Notice of Intent to Abandon.

If you are unable to plug the well by the 90<sup>th</sup> day provide this office, prior to the 90<sup>th</sup> day, with the reason for not meeting the deadline and a date when we can expect the well to be plugged. Failure to do so will result in enforcement action.

The rig used for the plugging procedure cannot be released and moved off without the prior approval of the authorized officer. Failure to do so may result in enforcement action.

2. Notification: Contact the appropriate BLM office at least 24 hours prior to the commencing of any plugging operations. For wells in Chaves and Roosevelt County, call 575-627-0272; Eddy County, call 575-361-2822; Lea County, call 575-393-3612.

3. Blowout Preventers: A blowout preventer (BOP), as appropriate, shall be installed before commencing any plugging operation. The BOP must be installed and maintained as per API and manufacturer recommendations. The minimum BOP requirement is a 2M system for a well not deeper than 9,090 feet; a 3M system for a well not deeper than 13,636 feet; and a 5M system for a well not deeper than 22,727 feet.

4. Mud Requirement: Mud shall be placed between all plugs. Minimum consistency of plugging mud shall be obtained by mixing at the rate of 25 sacks (50 pounds each) of gel per 100 barrels of brine water. Minimum nine (9) pounds per gallon.

5. Cement Requirement: Sufficient cement shall be used to bring any required plug to the specified depth and length. Any given cement volumes on the proposed plugging procedure are merely estimates and are not final. Unless specific approval is received, no plug except the surface plug shall be less than 25 sacks of cement. Any plug that requires a tag will have a minimum WOC time of 4 hours.

In lieu of a cement plug across perforations in a cased hole (not for any other plugs), a bridge plug set within 50 feet to 100 feet above the perforations shall be capped with 25 sacks of cement. If a bailer is used to cap this plug, 35 feet of cement shall be sufficient. Before pumping or bailing cement on top of CIBP, tag will be required to verify depth. Based on depth, a tag of the cement may be deemed necessary.

Unless otherwise specified in the approved procedure, the cement plug shall consist of either Neat Class "C", for up to 7,500 feet of depth or Neat Class "H", for deeper than 7,500 feet plugs.

6. Dry Hole Marker: All casing shall be cut-off at the base of the cellar or 3 feet below final restored ground level (whichever is deeper). The BLM is to be notified a minimum of 4 hours prior to the wellhead being cut off to verify that cement is to surface in the casing and all annuluses. Wellhead cut off shall commence within ten (10) calendar days of the well being plugged. If the cut off cannot be done by the 10<sup>th</sup> day, the BLM is to be contacted with justification to receive an extension for completing the cut off.

The well bore shall then be capped with a 4-inch pipe, 10-feet in length, 4 feet above ground and embedded in cement, unless otherwise noted in COA (requirements will be attached). The following information shall be permanently inscribed on the dry hole marker: well name and number, name of the operator, lease serial number, surveyed location (quarter-quarter section, section, township and range or other authorized survey designation acceptable to the authorized officer such as metes and bounds).

7. Subsequent Plugging Reporting: Within 30 days after plugging work is completed, file one original and three copies of the Subsequent Report of Abandonment, Form 3160-5 to BLM. The report should give in detail the manner in which the plugging work was carried out, the extent (by depths) of cement plugs placed, and the size and location (by depths) of casing left in the well. Show date well was plugged.

8. Trash: All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

Following the submission and approval of the Subsequent Report of Abandonment, surface restoration will be required. See attached reclamation objectives.